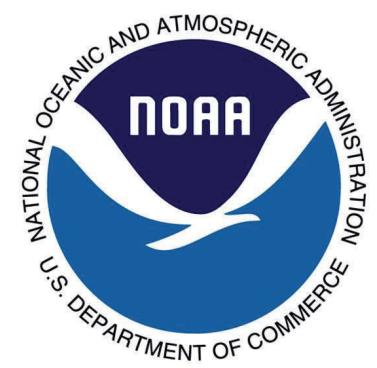


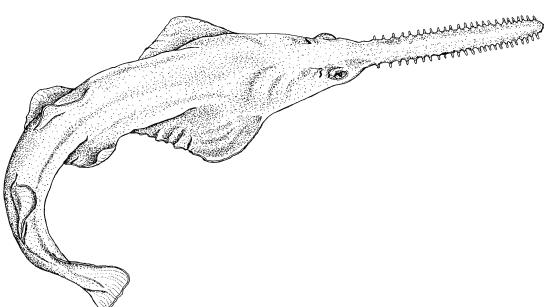
Smalltooth Sawfish Management Information



National Marine
Fisheries Service

Protected Resources
Division

This pamphlet provides information on the biology, population history, safe handling and release guidelines, and encounter reporting details for the endangered smalltooth sawfish.



Sawfish sketch courtesy of Mote Marine Laboratory

Sawfish Handling and Release Guidelines

Smalltooth sawfish are listed as endangered under the Endangered Species Act and “take” of listed species is prohibited under section 9 of the Endangered Species Act. “Take”, as defined by the Endangered Species Act means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. If a sawfish is hooked or netted it should be released immediately. Remove as much fishing gear as safely possible without harming the animal. Sawfish are large, powerful animals that can cause serious injury. For your safety, and the safety of the sawfish, use extreme caution if you hook or net one.

General guidelines:

- ◆ Keep the sawfish in the water as much as possible
- ◆ Do not remove the saw (rostrum) or injure the animal in any way.
- ◆ Use extreme caution when handling and releasing sawfish as the saw can thrash violently from side to side

For sawfish caught in trawl or gill net gear:

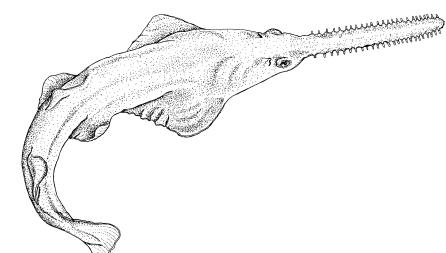
- ◆ Do not remove the fish's saw
- ◆ Leave the sawfish, especially the gills, in the water as much as possible
- ◆ Use line cutting pole or knife to cut any net tangled around the saw by cutting the mesh along the length of the saw
- ◆ Once mesh is cut, work it free with a boat hook or line cutting pole

For sawfish caught on longline gear:

- ◆ Keep the sawfish in the water at all times
- ◆ Use line cutting poles, boltcutters, long-handled dehookers and boat hooks to aid in removing gear, including hooks, from the sawfish
- ◆ If the sawfish is hooked and not entangled, cut the line as close to the hook as possible. Remove the hook with a dehooker, if possible
- ◆ If the sawfish is hooked and line is tangled around the saw (rostrum), remove all line with a boat hook or line cutting pole, then cut the line as close to the hook as possible. Remove the hook with a dehooker, if possible
- ◆ If hooked internally, do NOT attempt to remove the hook, use line cutting pole or boat hook to remove as much line as possible

National Marine Fisheries Service
Protected Resources Division
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This pamphlet was produced by Mote Marine Laboratory's Sawfish Research Project for National Marine Fisheries Service Office of Protected Resources, under Solicitation # WC133F-06-RQ-0656, in compliance with Section 212 of the Small Business Regulatory Enforcement Fairness Act.



Background

In November 1999, National Marine Fisheries Service (NMFS) received a petition from The Ocean Conservancy (formerly the Center for Marine Conservation) requesting that this species be listed as endangered under the Endangered Species Act (ESA). NMFS completed a status review in December 2000 and on April 1, 2003 announced its final determination to list smalltooth sawfish as an endangered species under the ESA. Under the ESA, it is illegal to catch, possess, harass or harm an endangered sawfish. However, some fishermen catch sawfish incidentally while fishing for other species. NMFS has developed these guidelines for fishermen on how to safely handle and release any sawfish they catch.

Conservation Efforts

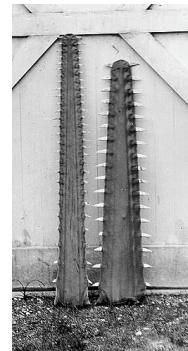
After listing under the ESA, NMFS convened the Smalltooth Sawfish Recovery Team comprised of scientists, fisheries managers, and environmental managers, to develop a plan to recover the U.S. population of smalltooth sawfish. The plan recommends specific steps to recover the population, focusing on reducing fishing impacts, protecting important habitats, and educating the public.

Species Description

Sawfish, like sharks, skates and rays, belong to a class of fish called elasmobranchs, whose skeletons are made of cartilage. Sawfish are modified rays with a shark-like body, and gill slits on their ventral, or under, side. Sawfish get their name from their "saws"- long, flat snouts edged with teeth which are used to locate, stun, and kill prey. Their diet includes mostly fish and some crustaceans. Smalltooth sawfish commonly reach 18 ft in length and may grow to 20 ft. Little is known about the life history of these animals but they may live up to 50 years, maturing after about 10 to 20 years. Like many elasmobranchs, smalltooth sawfish are ovoviparous, meaning the mother holds the developing young inside of her until they are ready to be born live, in litters of up to 20 pups.

Smalltooth vs. Largetooth Sawfish

The smalltooth sawfish is one of two species of sawfish that inhabit U.S. waters. However, the largetooth sawfish has not been definitively recorded in US waters for several decades. Several characteristics make the two species easy to distinguish.



Smalltooth sawfish (left)
Largetooth sawfish (right)

Photo courtesy of Florida
Museum of Natural History

Smalltooth Sawfish <i>Pristis pectinata</i> (left)	Largetooth Sawfish <i>Pristis perotteti</i> (right)
Saw slightly tapers to tip	Saw much wider at base than tip
22-34 teeth per side of saw	14-21 teeth per side of saw
First dorsal fin over origin of pelvic fins	First dorsal fin well in front of origin of pelvic fins
Caudal fin lacks a lower lobe	Caudal fin contains distinct lower lobe

Habitat

Sawfish species inhabit shallow coastal waters of tropical seas and estuaries throughout the world. They are usually found in shallow waters very close to shore over muddy and sandy bottoms. They are often found in sheltered bays, on shallow banks, and in estuaries or river mouths. Certain species of sawfish are known to ascend inland in large river systems, and they are among the few elasmobranchs that are known from freshwater systems in many parts of the world.

Distribution

Historically, the U.S. population of smalltooth sawfish was common throughout the Gulf of Mexico from Texas to Florida, and along the east coast from Florida to New York. The current range of this species has contracted to peninsular Florida, and smalltooth sawfish are relatively common only in the Everglades region at the southern tip of the state. No accurate estimates of abundance trends over time are available for this species. However, available records, including museum records and anecdotal fisher observations, indicate that this species was once common throughout its historic range and that smalltooth sawfish have declined dramatically in U.S. waters over the last century.

Population Trends

There are few reliable data available for this species, and no robust estimates of historic or current population size exist. However, available data indicate that the species' geographic range has been reduced by about 90%, and that the population numbers have declined dramatically, perhaps by 95% or more.

Threats

Sawfish are extremely vulnerable to overexploitation because of their propensity for entanglement in fishing gear, their restricted habitat, and low rate of population growth. The decline in smalltooth sawfish abundance has been caused primarily by bycatch in various fisheries, especially in nets. Because adults can grow very large, and potentially damage fishing gear or even pose a threat to fishermen, many incidentally captured sawfish were killed before they were removed from fishing gear. The loss of habitat also likely contributed to the decline of this species. Important habitats, such as mangrove forests, have been modified or lost due to development of the waterfront throughout their range.

Encounter Reporting Requirements

In your logbook, document as much information as possible including:

- ◆ Date and time of encounter
- ◆ Location (GPS coordinates)
- ◆ Habitat (water depth, bottom type)
- ◆ Estimated total length of sawfish including saw
- ◆ Tooth counts on left and right side of saw (rostrum) if possible to obtain safely
- ◆ Description of gear that could not safely be removed from the animal
- ◆ Markings, scars, wounds
- ◆ If present, record tag number and type (shape and color) (tags are on or below the dorsal fins), but do not remove the tag
- ◆ Details of capture (bait, hook size/type, mesh size, length of gear)
- ◆ Sex of sawfish, if known (male sawfish, like sharks, have two claspers at the base of the pelvic fins)

More information and recovery documents can be found at
<http://www.nmfs.noaa.gov/pr/species/fish/smalltoothsawfish.htm>